

FIG. 1

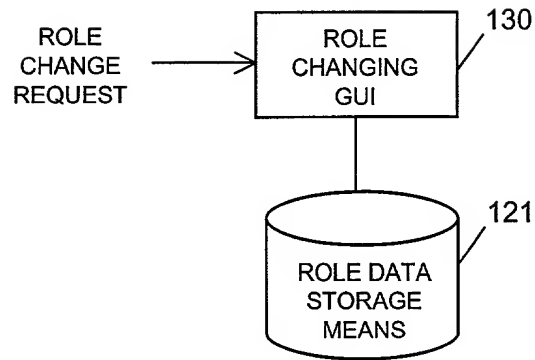


FIG. 2

```

1  /* role change request data structure */
2  request-info {
3    + role indicator
4    + other optional request information
5  }
  
```

FIG. 3

```

1  /* simplified algorithm for a Collection Role Changing GUI */
2  Receive a request to change to a new GUI role
3  Obtain role definition data from role data storage system
4  Update GUI data structures and display the requested role
  
```

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FIG. 4

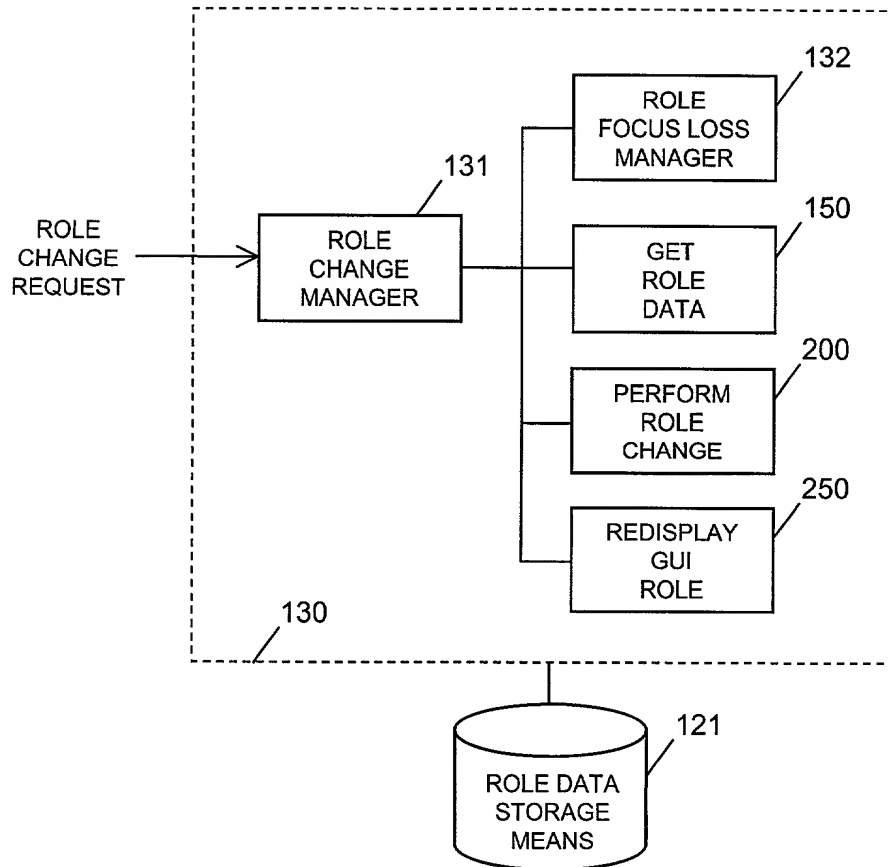


FIG. 5

- 1 /* simplified algorithm for a Role Change Manager */
- 2 Receive role change request
- 3 Perform loss of focus actions for current role
- 4 - focus loss manager performs cleanup operations
- 5 - focus loss manager performs logging and other operations
- 6 Obtain a new role definition from role data storage system
- 7 Perform the requested role change, and do focus gain actions
- 8 Redisplay the new GUI role

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FIG. 6

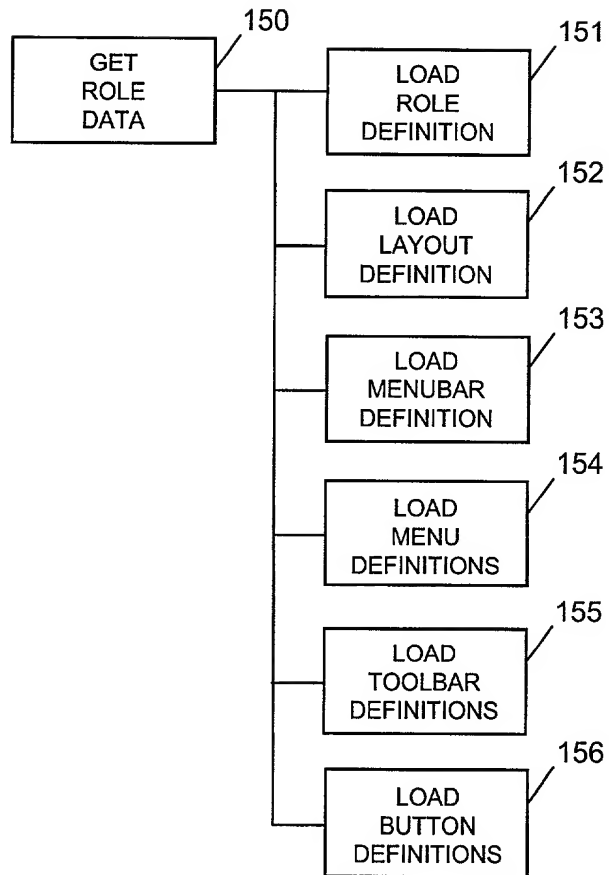


FIG. 7

- 1 /* simplified algorithm for Module Get Role Data */
- 2 Load role definition from role data storage system
- 3 Load layout definition
- 4 Load menubar definition
- 5 Load menu definitions
- 6 Load toolbar definitions
- 7 Load button definitions

FIG. 8

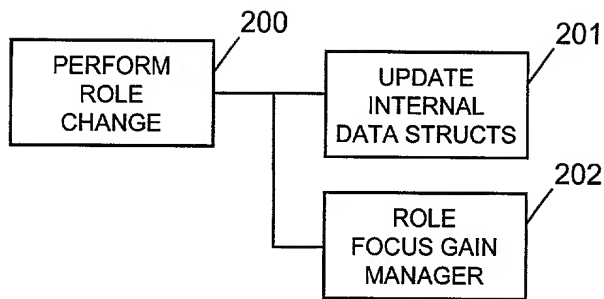


FIG. 9

- 1 /* simplified algorithm for Module Perform Role Change */
- 2 Update internal data structures with new role data
- 3 Perform role focus gain actions



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FIG. 10

```
1 extensible-gui.cfg:
2 # initial default values for an extensible gui
3 #
4 gui-initial-role-name    role-manager
5 ... other initial GUI configuration values
```

FIG. 11

```
1 name-role.tbl:
2 # table of named roles
3 # name          definition-file
4 manager         role-manager.def
5 developer       role-developer.def

6 role-manager.def:
7 role-layout     layout-manager
8 role-fgroup     fg-default
9 role-fvar       role-name default
10 focus-gain      <a GUI action to execute on focus gain>
11 focus-loss      <a GUI action to execute on focus loss>

12 role-developer.def:
13 role-layout     layout-developer
14 role-fgroup     fg-office-servers
15 role-fgroup     fg-office-repositories
16 role-fvar       role-name developer
17 focus-gain      <a GUI action to execute on focus gain>
18 focus-loss      <a GUI action to execute on focus loss>
```



FIG. 12

```
1  name-layout.tbl:
2  # layout names and their definition files
3  #
4  layout-default          layout-default.def
5  layout-programmer       layout-programmer.def
6  layout-html-worker      layout-html-worker.def
7  layout-manager          layout-manager.def

8  layout-programmer.def:
9  # GUI layout definitions for an office programmer
10 #
11 layout-menubar          mbar-programmer
12 layout-toolbar          tbar-office-dev-one
13 layout-toolbar          tbar-office-dev-two

14 layout-manager.def:
15 # GUI layout definitions for a manager
16 #
17 layout-menubar          mbar-manager
18 layout-toolbar          tbar-office
19 layout-toolbar          tbar-task-assignment-buttons
20 layout-toolbar          tbar-project-ops-buttons
```

FIG. 13

```

1  name-menubar.tbl:
2  # menu bar names and their definitions
3  #
4  mbar-default      mbar-default.def
5  mbar-manager      mbar-manager.def
6  mbar-programmer   mbar-programmer.def
7  mbar-mine         mbar-mine.def

8  mbar-default.def:
9  # a menu bar definition file
10 # tag menu-label  hotkey  menu-name
11 menu  "File"      F      menu-file
12 menu  "Edit"      E      menu-edit
13 menu  "Coll"      C      menu-collection
14 menu  "CKS"       K      menu-cks
15 menu  "Help"      H      menu-help

16 mbar-manager.def:
17 # menu bar for a manager
18 menu  "File"      F      menu-file
19 menu  "Edit"      E      menu-edit
20 menu  "Coll"      C      menu-collection
21 menu  "Projects"  P      menu-project
22 menu  "Teams"     T      menu-team
23 menu  "Staff"     S      menu-personnel

```

FIG. 14

```

1  name-menu.tbl:
2  # menus and their definition files
3  #
4  menu-cks          menu-cks.def
5  menu-collection   menu-collection.def
6  menu-edit         menu-edit.def
7  menu-file         menu-file.def
8  menu-help         menu-help.def
9  menu-personnel    menu-personnel.def
10 menu-project      menu-project.def
11 menu-team         menu-team.def

12 menu-file.def:
13 # definition for File menu
14 #
15 menu      menu-file
16 menu-choice "New"      N    a-coll-file-new
17 menu-choice "Open"    O    a-coll-file-open
18 menu-choice "Save"    S    a-coll-file-save
19 menu-choice "Save As" A    a-coll-file-save-as
20 end-menu

21 menu-collection.def:
22 # definition for Coll menu
23 #
24 menu      menu-coll
25 menu-choice "Install"  I    a-coll-select-and-install
26 menu-choice "Prev"    P    a-coll-select-prev-coll
27 end-menu

```


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FIG. 15

```
1  name-toolbar.tbl:
2  # toolbars and their definitions
3  #
4  tbar-default          tbar-default.def
5  tbar-programmer       tbar-programmer.def
6  tbar-office           tbar-office.def
7
8  tbar-office.def:
9  # toolbar definitions
10 #
11 tbar                   tbar-default
12 tbar-type              tbar-t-technical
13 tbar-display-text      yes
14 tbar-display-icons     yes
15 #
16 tbar-button            button-file-new
17 tbar-button            button-file-open
18 tbar-button            button-file-save
19 tbar-separator
20 tbar-button            button-cut
21 tbar-button            button-copy
22 tbar-button            button-paste
23 tbar-separator
24 tbar-button            button-coll-select
25 tbar-button            button-help
26 tbar-button            button-exit
27 #
28 end-tbar
```

FIG. 16

```

1  name-button.tbl:
2  # toolbar buttons and their definition files
3  #
4  button-file-new          buttons-default.def
5  button-file-open         buttons-default.def
6  button-file-save         buttons-default.def
7  button-select            buttons-default.def
8  button-help              buttons-default.def
9  button-exit              buttons-default.def

10 buttons-default.def:
11 # definitions for default buttons
12 #
13 button                    button-file-open
14 button-text                "File Open"
15 button-icon                icon-file-open
16 button-action              a-coll-file-open
17 end-button
18 # ... other buttons

```

FIG. 17

```

1  name-icons.tbl:
2  # list of symbolic icon names
3  #
4  icon-select                icon-select.ico
5  icon-exit                  icon-exit.ico
6  icon-file-open             icon-file-open.bmp
7  icon-file-save             icon-file-save.bmp

```



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FIG. 18

```
1  name-action.tbl:
2  # action names and their definition files
3  # name                definition-file
4  #
5  a-coll-file-edit      a-coll.def
6  a-coll-file-new       a-coll.def
7  a-coll-file-open      a-coll.def
8  a-coll-file-save      a-coll.def
9  a-coll-build-and-export a-action-misc.def
9  ...
10 a-focus-coll          a-focus-coll.def
11 a-focus-repository    a-focus-repository.def
12 a-focus-prev-role     a-focus-prev-role.def
13 ...
14 a-display-message     a-action-misc.def
15 a-file-cmd-dir         a-action-misc.def
16 a-edit-find-and-replace a-action-misc.def
17 ...
18 a-filename-set        a-action-vars.def
19 a-pathname-set        a-action-vars.def
```

